SHIP BUILDING MADE EASY

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649192953

Ship building made easy by G. W. Rogers

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

G. W. ROGERS

SHIP BUILDING MADE EASY

Trieste

SHIP BUILDING MADE EASY;

BY G. W. ROGERS,

ACT'G VOL. LIEUT. U. S. N.

ST. LOUIS:

R. P. STUDLEY & CO., PRINTERS, COR. MAIN AND OLIVE STREETS.

1865.

Eng. 5058.65.5

HARVARD COLLEGE LIBRARY

JUN 30 1915

CHARLES ELLIOTT PERKINS
MEMORIAL COLLECTION

PREFACE.

In publishing this, my second work on Ship Building, I have endeavored to simplify as much as possible the difficult parts. The work will be short, as I am explaining the plainer rules of ship draughting only, and have no doubt but by the time the new beginner is through with this little book, he will understand enough of draughting to enable him to manage the lines of a vessel in the mould loft, either by a model or otherwise.

HARVARD COLLEGE LIBRARY
JUN 30 1915
CHARLES ELLIOTT PERKINS
MEMORIAL COLLECTION

SHIP BUILDING MADE EASY.

CHAPTER I.

To commence the study of ship draughting, it is necessary to understand something of the simple parts of geometry, such as points, lines, angles, superfices, solids, &c. A point is position without magnitude; the commencement or termination of a line is a point, or where two or more lines cross each other.

A line is length without breadth or thickness. A line may be drawn from any given point to another given point. Either a curved or straight line, or two lines may be drawn at equal distances from each other, called parallel lines, and continued on for an indefinite length, as long as the equal distance is preserved; but as soon as the distance between them is either increased or diminished, they cease to be parallel lines, as they must necessarily cross each other when the distance is diminished, or diverge from each other when the distance is increased.

A circle is a plain figure, contained by one line called a circumference, which line is at equal distances in every part from a certain point within the circumference, called the centre. A line drawn from the

centre to the circumference is called the radius. (A, Fig. 1.) A line drawn through the centre, each way to the circumference, cuts the figure in two equal parts, called semicircle. This line is called the diameter of the circle. (B, Fig. 1.) A line drawn on either side of the centre, cutting the figure in two unequal parts, is called the chord. (C, Fig. 1.) An arc of a circle is any part of the circumference, as (D, E, F, Fig. 1.) A segment is an arc and its chord, as (D, C, F, E, D, Fig. 1.) A versed line is a line drawn from the middle of the chord at right angles till it reaches the circumference, as (C, E, Fig. 1.) A sector of a circle is that part of the area of a circle contained by an arc and two radii, as (G, H, I, Fig. 1.)

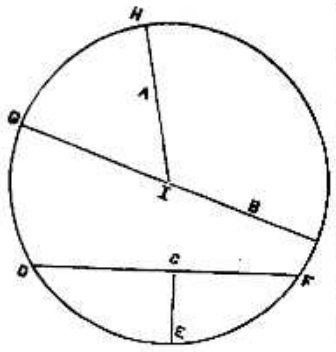

Fig. 1.

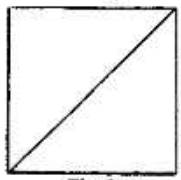
Fig. 2.

A square is a plain figure with all its sides equal, and all its angles right angles, as (Fig. 2.) A line drawn from one of its points diagonally to the other, cuts the figure in two equal parts, and is called the diameter of the square.

Fig. 3.

A rectangle is a four sided figure with all its angles right angles, but all its sides are not equal. It is also called parallelogram, as (Fig. 3.)

A parallelogram, whose sides are equal, but angles are not right angles, is called a rhombus, as (Fig. 4.)

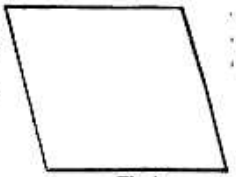

Fig. 4.

Also, one whose sides are not equal, and whose angles are not right angles, is called a rhomboid, as (Fig. 5.)

Fig. 5.

A plain figure has length and breadth, as Fig. 5, till by giving it also depth, as in Fig. 6 it becomes a solid; thus we see a line has only one property, viz: length; a plain figure two, viz: length and breadth; a solid three, viz: length, breadth and thickness.

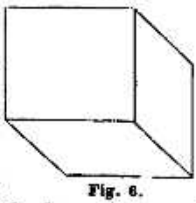

Fig. 6.

Fig. 7 is a right angle, or two sides of a square.

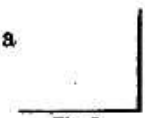

Fig. 7.

Fig. 8 is an obtuse angle, because it is greater than a right angle.

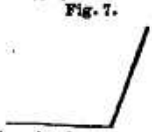

Fig. 8.

Fig. 9 is an acute angle, because it is less than a right angle.

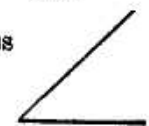

Fig. 9.